United States Patent [19]

Shieh

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[54] **BREAKAWAY TOUCHSCREEN POINTING DEVICE**

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[51] **Int. Cl.^{6}** **G09G 5/00**
[52] **U.S. Cl.** **345/173**; 345/156; 345/157
[58] **Field of Search** 345/157, 156, 345/163, 173, 177

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[57] **ABSTRACT**

An apparatus, method, and memory direct a computer system, having at least a touchscreen, to breakaway at least a portion of a virtual pointing device. The method includes displaying a virtual pointing device on the touchscreen, wherein a first cursor is associated with the virtual pointing device. The method also includes, in response to detecting at least one finger or stylus placed on at least a first portion of the virtual pointing device, breaking away only the first portion of the virtual pointing device in accordance with movement of the finger or stylus along the touchscreen. At least a first function is associated with the first portion.

15 Claims, 12 Drawing Sheets